107 LEGAL RELATIONS & RESPONSIBILITY TO PUBLIC

107.01 RESTORATION OF SURFACES OPENED BY PERMIT

The right to construct or reconstruct any utility service in a highway or street or to grant permits for same is expressly reserved by the Department and the Contractor shall not be entitled to any damages either for digging up a street or for any delay occasioned thereby.

When an individual, firm, or corporation is authorized to work in a street through a duly executed permit from the District, the Contractor shall allow parties bearing such permits, and only those parties, to make openings in the street. When ordered by the Engineer, the Contractor shall make all necessary repairs due to such openings and the work will be paid for as provided in the contract documents or as extra work, and will be subject to the same conditions as similar work performed.

107.02 FEDERAL PARTICIPATION (FEDERAL-AID PROJECTS)

Title 23 of the U.S. Code provides that when the U.S. Government participates in the cost of the work covered by the Contract, the work shall be under the supervision of the District but subject to the inspection and approval of the appropriate officials of the U.S. Government and in accordance with the applicable Federal Statutes, rules and regulations.

Such inspection will in no case make the Federal Government a party to this Contract, nor will it subject the Contractor to compliance with the Federal laws relative to labor on government contracts other than such labor requirements as are contained in the contract documents for the individual projects.

107.03 SANITARY, HEALTH AND SAFETY PROVISIONS

The Contractor shall provide and maintain in a neat, sanitary condition such accommodations for the use of employees as necessary to comply with the requirements and regulations of the District.

The Contractor and any subcontractors shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees. He shall comply with the current Federal Safety and Health Regulations for Construction.

107.04 PUBLIC CONVENIENCE AND SAFETY

The Contractor shall at all times conduct the work in such manner as to insure the least possible obstruction to traffic. The safety and convenience of the general public and of the residents along the way shall be provided for in satisfactory manner.

107.05 RAILWAY-HIGHWAY PROVISIONS

If the contract documents require that materials be hauled across the tracks of any railway, the Department will arrange with the railway for any new crossings required for or the use of any existing crossing. If the Contractor elects to use crossings other than those shown on the plans the Contractor shall make arrangements for the use of such crossings.

All work to be performed by the Contractor on the railroad right-of-way shall be performed at such times and in such manner as not to unnecessarily interfere with the movement of trains or traffic upon the track of the railway company. The Contractor shall use all care and precaution in order to avoid accidents, damage, or unnecessary delay or interference with the railway company's trains or other property.

107.06 CONSTRUCTION OVER OR ADJACENT TO NAVIGABLE WATERS

All work over, on, or adjacent to navigable waters shall be so conducted that free navigation of the waterways will not be interfered with and that the existing navigable depths will not be impaired except as allowed by permit issued by the U.S. Coast Guard and/or the U.S. Army Corps of Engineers, as applicable.

107.07 BARRICADES AND WARNING SIGNS

The Contractor shall provide, erect, and maintain all necessary barricades, suitable and sufficient lights, danger signals, signs and other traffic control devices, and shall take all necessary precautions for the protection of the work and safety of the public. Highways closed to traffic shall be protected by effective barricades, and obstructions shall be illuminated during hours of darkness. Suitable warning signs shall be provided to properly control and direct traffic.

The Contractor shall erect warning signs in advance of any place on the project where operations may interfere with the use of the road by traffic, and at all intermediate points where the new work crosses or coincides with an existing road. Such warning signs in advance of any place on the project where operations may interfere with the use of the road by traffic, and at all intermediate points where the new work crosses or coincides with an existing road. Such warning signs shall be placed and maintained in accordance with the plans furnished. No signs, barricades, lights, or other protective devices shall be dismantled or removed without permission of the Engineer.

All barricades, warning signs, lights, temporary signals, and other protective devices shall conform with the Manual on Uniform Traffic Control Devices for Streets and Highways and 616 Traffic Control of these specifications.

107.08 USE OF EXPLOSIVES

Prior to any blasting procedure, the Contractor shall obtain the Engineer's written approval to blast as well as a permit from the Department of Consumer and Regulatory Affairs.

Blasting shall meet requirements of applicable sections, including "Explosives and Blasting", of the District's Safety Standards, Rules and Regulations-Construction. Warning signs shall meet requirements of "Blasting Procedures" in the District's signing manual.

The Contractor shall obtain blasting insurance with per person/occurrence limits of \$300,000/600,000 for bodily injury and occurrence/aggregate limits of \$50,000 for property damage. A specimen copy of this insurance shall be furnished and approved prior to start of blasting work.

The Contractor shall give utility companies sufficient notification.

Permission to blast may be revoked at any time if blasting requirements are violated or if blasting becomes hazardous; work then shall proceed by other means at no change in contract price.

The time blasting takes place will be determined solely by the Engineer and shall be scheduled to provide minimum traffic interference. Blasts shall be recorded by seismographs furnished, installed and operated by the Contractor. Seismographs shall be located as directed. Upon completion of blasting, seismograph recordings with analyses shall be submitted to the Engineer.

Any excavation, shattered rock, void, fault or other conditions created by blasting outside prescribed blast area shall be backfilled and repaired in an approved manner at Contractor expense.

All damage and injury caused by blasting operations shall be promptly repaired in an approved manner at Contractor expense.

107.09 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE

The Contractor shall be responsible for the preservation of all public and private property and shall protect carefully from disturbance or damage at all Coast and Geodetic Survey, National Park Service, Metro or other survey markers or monuments. The Contractor shall not remove same until the respective authorities have been notified. The markers or monuments will be relocated by the respective authority. In the event they cannot be relocated in time for the Contractor to continue his operations without delay, the Contractor will be responsible for properly referencing their location. The Contractor shall be responsible for all damage or injury to property of any character during the prosecution of the work resulting from any act, omission, neglect, or misconduct in this manner or method of executing the work or at any time due to defective work or materials, and the Contractor's responsibility will not be released until the project has been completed and accepted.

The contractor shall not disturb in any way trees, fences, utility poles, wires, structures and other appurtenances, public or private, without the explicit consent of the proper party.

When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the nonexecution thereof by the Contractor, the Contractor shall restore at the Contractor's own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding, or otherwise restoring as may be directed or shall make good such damage or injury in an acceptable manner.

When approaching utilities, the Contractor shall give the owner thereof sufficient advance notice so the owner may accomplish any special measures needed. The Contractor shall provide any required access to utilization

107.10 NATIONAL HISTORIC PRESERVATION ACT of 1966

The Contractor agrees to contribute to the preservation and enhancement of structures and objects of historical, architectural, or archeological significance when such items are found and/or unearthed during the course of project construction. The Contractor shall act immediately to temporarily suspend work at the site of the discovery and to notify the Engineer, who will immediately consult with the District of Columbia Historic Preservation Officer for recovery of the items.

All articles of historical or scientific value, including but not limited to coins, fossils, and articles of antiquity which may be uncovered by the Contractor during the progress of work, shall become District

property.

107.11 TREE PROTECTION AND REPLACEMENT

- (A) **DESCRIPTION**. In carrying out the work of the contract the Contractor shall protect trees from damage during construction operations. Trees that are damaged or killed through neglect or failure to provide the necessary tree protection shall be replaced or compensation made as specified herein.
- **(B) CONSTRUCTION METHODS AND MATERIALS.** Protection from damage caused by equipment, fire, or carelessness shall include the following methods or measures:
- **1.** All trees to be preserved shall be protected against damage during construction operations by fencing or armoring. The tree protection shall be placed before any excavation or grading is begun.
- 2. No material shall be stored within 20 feet of any tree designated to be saved. Identification of species, location, size, and condition of trees to be preserved shall be done accurately on the topographic survey.
- **3.** Individual trees near heavy construction traffic shall be wrapped with burlap and 2 x 4 inch planks applied vertically and wired horizontally as armor around trunks. Spacings between planks shall be no more than 4 inches. Planks shall be 5 feet in length and their bottoms shall extend to 5 inches above ground level.
- **4.** Individual trees or trees in groups near construction traffic shall be protected by fencing. Fences shall have posts equivalent to 4 x 4 inches set 3 feet in the ground and extending 5 above the ground. Posts shall be set at intervals not to exceed 8 feet set in a square around the tree(s). Vertical boards, 1 x 6 inch, shall be nailed to 2 walers. Space between vertical boards shall not exceed 6 inches.
- **5.** Trees having low-hanging branches liable to injury shall be fenced around the outer perimeter of the spread of their branches. Fences shall be standard 48 inch high snow fence mounted on standard steel posts set not more than 6 feet apart.
- **6.** Any damage done to existing tree crowns or root systems shall be repaired immediately by the Contractor under the direction of the Engineer.

Roots exposed or damaged during grading operations shall immediately be pruned off cleanly inside the exposed or damaged area. Cut surfaces shall be painted with an approved tree wound dressing. Topsoil or well-rotted manure shall then be spread over the exposed area to a depth of 2 to 4 feet in a trench 1 foot wide in order to induce a fibrous root system regeneration. Reconditioning of trees shall include removal of dead wood and suckering growth and pruning where necessary to promote proper growth in terms of form, branching, and foliage conservation. Trees shall be thoroughly watered at 10 day intervals throughout the growing season.

- 7. Fires for any reason shall not be made within 50 feet of any trees selected to remain.
- **8.** If any trees designated to be saved are severely injured or killed by mechanical equipment or through neglect, they shall be replaced in kind by the Contractor at no cost to the District, or by the payment of a sum of dollars in fixed liquidated damage according to the following schedule:

2 to 6 inch caliper \$90.00 per inch of caliper

over 6 to 12 inch caliper \$100.00 per inch of caliper

over 12 inch caliper \$110.00 per inch of caliper

The caliper or diameter of the tree trunk shall be measured waist high above ground. Trees to be replaced in kind shall be planted in accordance with 611.02.

107.12 INSURANCE

Prior to commencement of any contract, work of any nature, and in addition to other insurance, bonds or securities required by law or under contract terms, the Contractor shall procure and maintain, during the life of the contract, the following types of insurance in the amounts set forth:

(A) BODILY INJURY LIABILITY AND PROPERTY DAMAGE LIABILITY INSURANCE.

The Contractor shall furnish evidence satisfactory to the District that, with respect to the operations he performs, he carries in his own behalf insurance with minimum per person/occurrence limits of \$500,000.00/\$1,000,000.00 for bodily injury and occurrence/aggregate limits of \$150,000/\$300,000 for property damage.

A specimen copy of the Contractor's complete insurance policy shall be furnished to and approved by the District prior to commencement of any work.

(B) PROTECTIVE BODILY INJURY LIABILITY AND PROPERTY DAMAGE LIABILITY INSURANCE. The Contractor shall furnish evidence satisfactory to the District that, with respect to the operations performed for him by subcontractors, he carriers in his own behalf, Owners and Contractors Protective Liability Insurance with minimum per person/occurrence limits of \$500,000/\$1,000,000 for bodily injury and occurrence/aggregate limits of \$150,000/\$300,000 for property damage.

A specimen copy of the Contractor's complete insurance policy shall be furnished to and approved by the District prior to commencement of any work.

(C) MOTOR VEHICLE INSURANCE. The Contractor shall furnish evidence satisfactory to the District that with respect to operations he performs, he carries in his own behalf, Motor Vehicle Insurance with per person/occurrence limits of \$200,000/\$500,000 for bodily injury and occurrence/aggregate limits of \$50,000 for property damage. This policy shall cover all owned, hired, or non-owned motor vehicles used in conjunction with the project.

A specimen copy of the Contractor's complete insurance policy shall be furnished to and approved by the District prior to commencement of any work.

(D) INSURANCE CONDITIONS. All insurance shall be purchased from a company or companies authorized to do business in the District.

Each policy required by the contract shall contain a legally binding endorsement which states: "The insurer hereby warrants and agrees that it shall not cancel or alter the insurance coverage afforded by this policy, except after thirty (30) days written notice has been received by the Contracting Officer from the

insurer."

Each policy shall be certified to be complete in accordance with specific contract provisions by an officer of the issuing insurance agency.

In addition to complete copies of each insurance policy required by the Contract, a certificate of insurance shall be attached to each policy and shall make reference to this Article 107.12 and any Special Provision modifying insurance provisions and shall contain a provision that the District be notified 30 days in advance of any contemplated change in the policy of whatever nature.

All policies and certificates shall be sent to Chief, Construction Management Division, Bureau of Transportation Construction Services, Department of Public Works, 4901 Shepherd Parkway, S.W., Washington, D.C. 20032.

Notice of any proposed change or cancellation of the above insurance shall be sent directly to the Engineer.

Insurance shall be carried until all required contract work is completed as evidenced by the District's acceptance.

The cost of insurance shall be reflected and distributed among the contract pay items.

107.13 OPENING OF SECTIONS OF PROJECT TO TRAFFIC

Whenever, in the opinion of the Engineer, any roadway or portion thereof is in acceptable condition for travel, it shall be opened to traffic, as may be directed, and such opening shall not be held to be in any way an acceptance of the roadway or any part of it, or as a waiver of any of the provisions of these specifications and contract.

107.14 CONTRACTOR'S RESPONSIBILITY FOR WORK

Until final acceptance of the project by the Engineer, the Contractor shall be responsible for the project and shall take every precaution against injury or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the nonexecution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except damage to the work due to unforeseeable cause beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God, or acts of the public enemy or of governmental authorities.

In case of suspension of work from any cause whatever, the Contractor shall be responsible for the project and shall take such precautions as may be necessary to prevent damage to the project, provide for normal drainage and shall erect any necessary temporary structures, signs, or other facilities. During such period of suspension of work, the Contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established plantings, seedings, and soddings furnished under the contract, and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury.

107.15 UTILITY PROTECTIVE ALERT

At least 48 hours, but not more than 10 days (excluding Saturday, Sunday and holidays) in advance of proceeding with excavation or demolition work necessitated by this Contract, the Contractor shall notify the following parties, by telephone, of the impending excavation or demolition and the location thereof:

NAME	TELEPHONE NO.	FACILITIES
"Miss Utility" for Wash. Gas. Light Co., Bell Atlantic, PEPCO, AT&T	800-257-7777	gas lines; telephone, electric and communication conduit and cables
D.C. Public Works 673-6	673-6600 727-5867 727-5666 939-8087	termains sewers fire alarm and electrical system street lighting inspection traffic signal system
GSA*	472-9252, 3,&4	steam piping, steam tunnel and condenser water conduit

^{*}GSA shall be contacted only if excavation work will occur within the following areas:

Northwest Southwest

South of H Street North of D Street
West of First Street West of Third Street

East of Rock Creek Parkway East of Seventeenth Street

The Contractor shall not proceed with work until utility facilities have been located, disconnected or otherwise adjusted by utility representatives. Hand digging is required within 18 inches from the nearest point of a natural gas line. D.C. Government contractors may hand dig a test pit to locate the line. In either case, the Contractor shall use care to avoid damage to all underground facilities. If an underground facility is damaged, under no circumstances shall a contractor backfill an excavation without first receiving permission from the utility operator whose facility was damaged.

107.16 ENVIRONMENTAL PROTECTION

(A) WATER QUALITY.

(1) **DESCRIPTION.** The Contractor shall provide temporary measures to control soil erosion and sediment through the use of swales, dikes, sediment basins or traps, berms, silt fences, dams, paved chutes or flumes, riprap, fiber mats, netting, gravel, mulches, grasses or other devices or methods. Permanent control provisions, contained in the contract shall be coordinated with the temporary control provisions to the extent practical to assure economical, effective and continuous control throughout the construction and post-construction periods.

The District of Columbia Department of Public Works has adopted the D.C. Department of Consumer and Regulatory Affairs "1987 Standards and Specifications for Soil Erosion and Sediment Control" and the District of Columbia "Erosion and Sediment Control Handbook". All work described herein shall be performed in strict conformance with the requirements of Sections I (Temporary Practices) and II (Permanent Practices) as applicable of the DCRA Standards and Specifications and in accordance with the erosion control regulations in the current Title 21 of D.C. Municipal Regulations (DCMR 21). Copies of the referenced USDA publications are available to persons, at no cost, in the office of the Program Manager, Soil Resources Management Division, Department of Consumer and Regulatory Affairs, 2100 Martin Luther King, Jr. Avenue, S.E., Washington, D.C. 20020.

(2) CONSTRUCTION REQUIREMENTS. Prior to the start of any land disturbing activity, the Contractor shall submit for approval his written proposals and schedules for accomplishment of soil erosion and sediment control work. The proposals and schedules shall be submitted to the Chief, Materials Development and Research Branch, Department of Public Works for approval. No work on land disturbing activities is to be started until the control proposals, schedules, and methods of operation have been received and approved.

The Engineer has the authority to limit the surface area of erodible earth material exposed by clearing and grubbing, and by excavation, borrow and fill operations. The Engineer may direct the Contractor to provide immediate permanent or temporary control measures to prevent contamination of adjacent streams or other watercourses, lakes, ponds, or other areas of water impoundment, and to prevent damaging erosion or sediment deposits into the sewer system or on neighboring lands. Such work may involve the construction of interim berms, dikes, dams, sediment basins, and slope drains, and use of interim mulches, mats, seeding, or other control devices or methods as necessary to control erosion and sedimentation. Fill and cut slopes shall be seeded and mulched as the excavation proceeds to the extent considered desirable and practicable. In some instances, incremental heights of slopes for sequential seeding and mulching will be specified.

The Contractor shall be required to incorporate all permanent erosion and sediment control features into the project at the earliest practicable time as outlined in his accepted schedule. Temporary erosion and sediment control measures will be used as needed to correct conditions that develop during construction that were not foreseen during the design stage; as needed prior to installation of permanent control features; and as needed temporarily to control erosion or sedimentation that develops during normal construction practices but are not associated with permanent control features on the project.

Where erosion is likely to be a problem, clearing and grubbing operations should be so scheduled and performed that grading operations and permanent erosion and sediment control features can follow immediately thereafter if the project conditions permit; otherwise, temporary control measures may be required between successive stages. Under no conditions shall the surface area of erodible earth material exposed at one time by clearing and grubbing exceed 50,000 square feet without approval of the Engineer. The limitation will apply to clearing operations only unless exempted by the Engineer.

The Engineer will limit the area of excavation, borrow, and embankment operations in progress commensurate with the Contractor's capability and progress in keeping the finish grading, mulching, seeding, and other such permanent erosion and sediment control measures current in accordance with the approved schedule. Should seasonal limitations make such coordination unrealistic, temporary control measures shall be taken immediately to extent feasible and justified.

Under no conditions shall the amount of surface area of erodible earth material exposed at one time by excavation, borrow, or fill within the right-of-way exceed 50,000 square feet without prior approval by the Engineer. This is in addition to the limitation on clearing and grubbing previously set forth.

The Engineer may increase or decrease the surface area of erodible earth material to be exposed at one time by clearing and grubbing, excavation, borrow, and fill operations as determined by an analysis of project conditions. The roadbed area will be included in the surface area limitations if site conditions are judged to be unfavorable by the Engineer. Erosion and sediment control measures shall be required on construction work outside the right-of-way where such work is necessary as a result of roadway construction. Included are borrow pit operations, haul roads and equipment storage sites within the District of Columbia.

The erosion and sediment control features installed by the Contractor shall be acceptably maintained by the Contractor until accepted by the District.

In the event of conflict between these requirements and laws, rules, or regulations of other Federal or State or local agencies, the more strict laws, rules, or regulations shall apply.

(3) MEASURE AND PAYMENT. Unless otherwise provided in the Special Provisions, no measure or payment will be made and the cost of meeting requirements of this article shall be reflected in and distributed among the contract pay items.

Temporary erosion control measures required due to Contractor negligence, carelessness, or failure to install permanent controls as scheduled shall be at Contractor expense.

The Engineer reserves the right to employ outside assistance or to use District forces to provide needed erosion control measures if the Contractor fails to do so. Such incurred direct cost plus project engineering cost will be charged to the Contractor.

(B) STORMWATER MANAGEMENT.

(1) GENERAL. The Contractor shall be responsible for providing a stormwater management plan which complies with all aspects of Section 509-518 of D.C. Law 5-188. In general, the plan shall be designed in accordance with the Department of Consumer and Regulatory Affairs (DCRA) "Stormwater Management Guidebook". Included shall be plans, details, computations and related data for the design and construction of stormwater infiltration, detention, retention or attenuation structures or any other devices necessary to abate pollution or control runoff from the site.

Copies of the Stormwater Management Guidebook may be obtained from the DCRA Environmental Regulation Administration, Soil Resources Management Division, 2100 Martin Luther King, Jr. Avenue, S.E., Washington, D.C. 20020

(2) MEASURE AND PAYMENT. Unless otherwise provided in the Special Provisions, no measure or payment will be made and the cost of meeting requirements of this article shall be reflected in and distributed among the contract pay items.

(C) AIR QUALITY CONTROL.

(1) **GENERAL**. The Contractor shall take necessary action to comply with requirements of the air quality control Regulations in the current Title 20 of the District of Columbia Municipal Regulations

(DCMR 20), "Environment and Energy", available at the Publication Office in the District Building.

(2) CONTROL OF FUGITIVE DUST. All work and storage space shall be designed and maintained so that fugitive dust (solid, airborne particulate matter emitted from any source other than through a stack) is kept to a minimum.

The Contractor shall take necessary precautions to assure that no person will cause, suffer, allow or permit any materials to be handled, transported, or stored, or a building and its appurtenances, or a road, to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. The Contractor's reasonable precautions shall include, but are not limited to the following:

- (a) Use of water or chemicals, where possible, for control of dust in the demolition of existing structures, construction operations, the grading of roads, or the clearing of land;
- (b) Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials, stock piles, or other surfaces which can create airborne dusts;
- (c) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, and employment of adequate containment methods during sand blasting or similar operations;
- (d) Covering, at all times when in motion, the contents of open bodied trucks transporting materials likely to become airborne;
 - (e) Paving of roadways and their maintenance in a clean condition;
- (f) Prompt removal of earth or other material from a paved street, where the earth or other material has been transported thereto or accidentally deposited by trucking or earth moving equipment or erosion by water.
- (3) VISIBLE EMISSIONS. All construction equipment used on the construction project shall meet the following emission requirements of the DC Air Quality Control Regulations:

Except as otherwise provided in the DC Air Quality Control Regulations, no person shall cause, suffer, or allow to be emitted into the outdoor atmosphere, visible emissions from stationary sources: Provided that discharges not exceeding forty percent (40%) capacity (unaveraged) shall be permitted for two (2) minutes in any 60 minute period and for an aggregate of twelve (12) minutes in any twenty four (24) hour period. These discharges shall be allowed only for "start-up", cleaning, soot blowing, adjusting combustion controls, or malfunction of equipment. Where the presence of uncombined water is the only reason for failure of an emission to meet the requirements of this section, this section shall not be applicable.

- (4) EXHAUST EMISSIONS. No person, nor his employees nor agents, shall cause, suffer, permit or allow the engine of a gasoline, or diesel powered motor vehicle including private passenger vehicles, on public or private space to idle for more than 3 minutes while such motor vehicle is parked, stopped or standing, except as follows:
- (a) To permit the operation of power takeoff equipment such as, but not limited to dumping, cement mixers, refrigeration systems, content delivery, winches, or shredders.

- (b) To permit the operation of heating equipment when the local temperature is 32°F or below.
- **(5) EQUIPMENT**. The Contractor shall use, where possible, diesel powered vehicles and equipment.

(6) OPEN BURNING.

- (a) Prohibition of Open Burning. Except as otherwise provided by subsection (b), no person shall ignite, cause to be ignited, permit to be ignited, or maintain, any open fire.
 - (b) Exceptions. Open fires may be permitted for one or more of the following reasons or purposes:
 - (1) Prevention of a fire hazard which cannot be abated by other means; or,
- (2) Providing warmth for construction or other workers by use of salamander heaters or other heating methods approved by the Engineer.

(D) NOISE.

- (1) GENERAL. The Contractor shall conduct all operations for the prosecution of the work in compliance with the regulations set forth below controlling maximum noise levels due to construction work. At the site of the work special precautions and noise abatement measures shall be taken by the Contractor in order to reduce exposure to noise. In addition to the specified sound measurements required herein, the Contractor shall conduct measurements whenever the Engineer determines any noises to be excessive.
- **(2) HEALTH AND SAFETY ACT**. The Contractor is required to meet the standards of the Federal Occupational Safety and Health Act of 1971 or most recent revision thereof.
- (3) MEASURING SOUND LEVELS. Sound levels as specified herein shall be measured on a sound level meter conforming to American National Standard Specifications for Sound Level Meters, S 1.41971 or its latest revision for Type I (Precision) or Type II (General Purpose) Sound Level Meters.
- (4) PUBLIC NOISE EXPOSURE. Sound levels for public noise exposure due to construction will be measured at the point adjacent to the site of the work in normal use by the public while construction work is in progress. These sound levels shall be measured on the A Scale of a sound meter at slow response. These sound levels may not exceed the following:

Duration per day in hours Sound level in dBA

-			
	8		90
	6		92
	4		95
	3		97
	2		100
	1-1/2		102
	1	•	105
	1/2		110
	1/4 or less		115

Sound level for impulsive or impact noise (noise of duration less than one second) shall not exceed a peak sound pressure level of 140 dB when measured on an approved impact noise analyzer. In lieu of the above procedure, 125 dB measured on the C Scale of a sound level meter at fast response will be accepted as an equivalent measure of the peak sound pressure level.

Impact noise generating equipment may only be used during the hours of 7:00 a.m. to 10:00 p.m., Monday through Friday.

(5) ADDITIONAL SOUND LEVELS. Additional sound levels for noise due to construction will be measured at the street line of the structure adjacent to and along the area of the Contractor's operation's and plant. Sound levels measured on the A Scale of a sound level meter set for slow response shall be at the street line and shall not exceed the following:

Residential Structures:

Daily, except Saturday and Sunday,
7:00 a.m. to 10:00 p.m. - 75 dBA
10:00 p.m. Friday to 7:00 a.m. Monday - 60 dBA
Daily 10:00 p.m. to 7:00 a.m. and
10:00 p.m. Friday to 7:00 a.m. Monday - 60 dBA

Factory - Commercial Structures: 90 dBA, unless otherwise permitted by the Engineer.

- (6) NOISE CONTROL REQUIREMENTS. In connection with the observance of noise control requirements the Contractor shall provide such equipment, sound deadening devices and take such noise abatement measures that are necessary to comply with the requirements of the contract, consisting of, for example, the following:
 - **a.** Shields or other physical barriers to restrict the transmission of noise.
 - **b.** Sound proofing housing or enclosures for noise producing machinery.
- **c.** Use of electrically operated hoists and compressor plants, unless otherwise permitted by the Engineer.
 - **d.** Silencers on air intakes of equipment.
 - e. Maximum sized intake and exhaust mufflers on internal combustion engines.
 - **f.** Gears on machinery designed to reduce noise to a minimum.
- **g.** The prohibition of the use of air or gasoline driven saws, unless otherwise permitted by the Engineer.
- **h.** Conducting the operation of hauling construction materials in trucks so that noise is kept to a minimum.
 - i. Routing of construction equipment and vehicles carrying rock, concrete or other materials over

streets that will cause the least disturbance to residents in the vicinity of the work.

107.17 WATER SUPPLY

The Contractor shall obtain a permit from the Department of Consumer and Regulatory Affairs to use water for construction purposes from public hydrants or to connect to the water system with a temporary tap.

If the Department determines that fire hydrant water may be used, the Contractor shall be charged the standard \$25.00 flat rate per working day.

If the Department determines a temporary water main tap is required, the Contractor shall excavate a pit for a tap as directed, excavate the trench and install water service piping. The District will make the tap, furnish and install a meter at no cost to the Contractor. Temporary water taps require a \$75.00 permit fee plus a \$780.00 deposit. At completion of the Contract, the Contractor shall excavate a pit for tap removal by the District, excavate and remove water service piping and backfill to the satisfaction of the District. The District will remove the water meter at no additional cost to the Contractor.

The District will keep an account for direct payment by the Contractor of water and sewer charges.

On EPA funded projects, the District will install a meter on water services to the Contractor's Field Office and the Engineer's Facilities (field office). The Contractor will not be charged for this water usage.

River and stream water shall not be used. Water from a source other than a hydrant or tapped water main will be subject to test per AASHTO T26.

107.18 CIVIL RIGHTS

The applicable provisions of Title VI of the Civil Rights Act of 1964, as amended, apply to this Contract for both the prime Contractor, all subcontractors, and all suppliers, vendors and/or manufacturers.